the requirements of paragraph (b) of this section.

§ 74.57 Alarm resolution.

- (a) Licensees subject to §74.51 shall provide the MC&A alarm resolution capabilities described in paragraphs (b) through (f) of this section.
- (b) Licensees shall resolve the nature and cause of any MC&A alarm within approved time periods.
- (c) Each licensee shall notify the NRC Operations Center by telephone of any MC&A alarm that remains unresolved beyond the time period specified for its resolution in the licensee's fundamental nuclear material control plan. Notification must occur within 24 hours except when a holiday or weekend intervenes in which case the notification must occur on the next scheduled workday. The licensee may consider an alarm to be resolved if:
- (1) Clerical or computational error is found that clearly was the cause for the alarm; or
- (2) An assignable cause for the alarm is identified or it is substantiated that no material loss has occurred.
- (d) If a material loss has occurred, the licensee shall determine the amount of SSNM lost and take corrective action to:
- (1) Return out-of-place SSNM, if possible, to its appropriate place;
- (2) Update and correct associated records; and
- (3) Modify the MC&A system, if appropriate, to prevent similar future occurrences.
- (e) The licensee shall provide an ability to rapidly assess the validity of alleged thefts.
- (f) If an abrupt loss detection estimate exceeds five formula kilograms of SSNM:
- (1) Material processing operations related to the alarm must be suspended until completion of planned alarm resolution activities, unless the suspension of operations will adversely affect the ability to resolve the alarm. Operation of continuous processes may continue for 24 hours from the time of the occurrence of the alarm during which time checks shall be made for mistakes in records or calculations that could have caused the alarm.

(2) Within 24 hours, the licensee shall notify the NRC Operations Center by telephone that an MC&A alarm resolution procedure has been initiated.

[52 FR 10040, Mar. 30, 1987, as amended at 54 FR 6877, Feb. 15, 1989; 55 FR 5979, Feb. 21, 1990; 60 FR 24553, May 9, 1995; 67 FR 78148, Dec. 23, 2002]

§ 74.59 Quality assurance and accounting requirements.

- (a) Licensees subject to §74.51 shall provide the quality assurance and accounting capabilities described in paragraphs (b) through (h) of this section.
- (b) Management structure. The licensee shall:
- (1) Establish and maintain a management structure that includes clear overall responsibility for planning, coordinating, and administering material control and accounting functions, independence of material control and accounting functions from production responsibilities, and separation of functions such that the activities of one individual or organizational unit serve as controls over and checks of the activities of others; and
- (2) Provide for the adequate review, approval, and use of those material control and accounting procedures that are identified in the approved FNMC plan as being critical to the effectiveness of the described system.
- (c) Personnel qualification and training. The licensee shall assure that personnel who work in key positions where mistakes could degrade the effectiveness of the material control and accounting system are trained to maintain a high level of safeguards awareness and are qualified to perform their duties and/or responsibilities.
- (d) *Measurements.* The licensee shall establish and maintain a system of measurements sufficient to:
- (1) Substantiate the plutonium element and uranium element and isotope content of all SSNM received, produced, transferred between areas of custodial responsibility, on inventory, or shipped, discarded, or otherwise removed from inventory;
- (2) Enable the estimation of the standard deviation associated with each measured quantity; and